

ABSTRACT OF THE DISCLOSURE

A cross dichroic prism for color decomposition includes a blue-reflecting dichroic film for reflecting a blue light component and a red-reflecting dichroic film for reflecting a red light component. Each dichroic film comprises lower and higher refractive index materials alternately laminated on a prism base. The cross dichroic prism satisfies $1.105 \leq N_h/N_l \leq 1.450$ if $N_g \leq N_l$, or $1.118 \leq N_h/N_l \leq 1.150$ if $N_g > N_l$, where N_g is the refractive index of the prism base, N_h is the refractive index of the higher refractive index material, and N_l is the refractive index of the lower refractive index material.